

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 87-031

WASTE DISCHARGE REQUIREMENTS FOR:

PORT SONOMA MARINA
PORT SONOMA, SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Port Sonoma Marina (hereinafter called the discharger) currently operates Port Sonoma Marina, a 442 berth marina on the east side of the mouth of the Petaluma River between Sears Point Road (State Route 37) and the Northwestern Pacific Railroad. The Marina complex presently includes restrooms; pumpout facilities for vessel holding tanks and chemical toilets; recreational facilities; and office, residential, and commercial dwellings.
2. The waste disposal system currently consists of:
 - a. a subsurface disposal system consisting of two septic tanks and a leachfield, and
 - b. a wastewater treatment system consisting of a sewer system, two clarifying tanks and a 2.6 acre evaporation pond

The discharger's waste management system is capable of storing and disposing of a projected average annual wastewater flow of 5,350 gpd plus 28 inches of rainfall (10 year seasonal storm), while maintaining a minimum of two feet of freeboard in the evaporation ponds.

3. The discharger has proposed to expand the existing marina from 442 berths to 485 berths. The additional berths will be located at the northernly end of the marina in the area identified as Marina III (See attached site map). The proposed marina expansion also includes a 200 seat restaurant.
4. The discharger has proposed to upgrade its existing waste disposal system to meet County standards for the size and activities within the marina. The upgraded waste disposal system will be able to store and dispose of a projected flow of 15,475 gpd (See attached project map). The upgraded system will consist of:
 - a. a 0.43 acre areation pond,
 - b. a 2.38 acre evaporation pond, and
 - c. a 2.5 acre spray disposal field with an additional 2.0 acres to be developed in the future.

- d. The septic tanks will be cleaned and remain on standby in case of emergencies.
5. The Discharger has submitted a Report of Waste Discharge, dated December 8, 1986 and supporting technical reports dated September 9, 1986. The latter reports include detailed water balances for the upgraded wastewater disposal system.
6. A Use Permit for the expansion of the marina was granted on October 30, 1986. A Negative Declaration was also adopted after it was determined that there would be no significant environmental effects resulting from the project provided that mitigation measures are incorporated in the project.
7. The discharger is presently operating under Waste Discharge Requirements Order No. 84-52 adopted on August 15, 1984.
8. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the San Francisco Bay Region on December 17, 1986. The Basin Plan contains water quality objectives for the Petaluma River and San Pablo Bay.
9. The beneficial uses of the Petaluma River and San Pablo Bay include:
 - a. Recreation
 - b. Navigation
 - c. Fish migration and habitat
 - d. Habitat and resting for waterfowl, migratory birds and certain rare and endangered species
 - e. Industrial water supply
 - f. Commercial fishing and shellfish harvesting
10. The Board has notified the discharger and interested agencies of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and comments.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Port Sonoma Marina, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. The discharge of sewage or other wastes to waters of the State is prohibited.
2. Bypassing of wastewater from the collection system is prohibited. If bypassing should occur, the discharger shall notify this Board's Executive officer as soon as possible of said bypass.
3. Discharge of wastewater to any land other than the ponds and the designated spray disposal field is prohibited.

4. Wastewater ponding due to spray disposal which could provide a breeding area for mosquitoes is prohibited.

B. Discharge Specifications

General

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharger of waste shall not degrade the quality of any ground water suitable for domestic use or cause and increase in any quality parameter that would make ground water unsuitable for irrigation use.
3. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
4. The discharge of waste shall not cause seepage to be present outside the treatment ponds or spray disposal areas.

Waste Treatment Ponds

5. Wastes at the surface of the evaporation and aeration ponds shall meet the following quality limits at all times:

In any grab sample:

Dissolved Oxygen	2.0 mg/l minimum
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Dissolved Sulfide	0.1 mg/l maximum
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6. The evaporation pond shall be protected from erosion, and washout and flooding having a predicted frequency of once in 100 years. A minimum of two feet of freeboard shall be maintained in the pond at all times.
7. The public shall be effectively excluded and notified of the presence of wastewater in the pond.
8. The wastewater flow to the treatment ponds is to be metered and shall not exceed a maximum of 15,475 gallons per day, weekly average.

Septic Tank Leachfields

9. Wastes discharged to leachfields:
 - a. Shall remain below ground at all times.
 - b. Shall not cause degradation of groundwater suitable for domestic or agricultural use.

c. Shall not leach into waters of the Marina.

C. Spray Disposal Restrictions

1. The treatment, distribution, or spray disposal of wastewater shall not create a nuisance as defined in Section 13050 (m) of the California Water Code.
2. No waste shall be applied to any disposal area during the wet weather season (November 1 through April 15), when the ground is saturated, or during periods of rainfall.
3. Spray disposal shall be limited to the areas specified in finding 4 of this Order unless written authorization is obtained from the Executive Officer.
4. A minimum 100 foot setback along the boundries of the disposal areas shall be maintained during spraying.
5. No waste shall be allowed to escape from the discharger's property into waters of the State via surface flow, airborne spray or resurfacing after percolation.
6. Spray disposal shall be applied to the use area in a manner which will prevent public contact with the wastewater.
7. The public shall be effectively excluded from the spray disposal areas by means of fencing or other type of barrier.
8. Spray disposal shall be clearly identified with posted notices to the public.
9. All equipment, including pumping, piping, valves, etc., which may at any time contain waste shall be adequately and clearly identified with warning signs, and the discharger shall make all necessary provisions, in addition, to inform the public that the liquid contained in the equipment is wastewater and is unfit for human consumption.

D. Spray Disposal Water Quality Specifications

1. The wastewater as discharged from the treatment and storage facilities to the spray disposal area shall be at all times an adequately treated wastewater and shall meet the following quality limits at all times:

In any grab sample:

Settleable solids	0.5 ml/l-hr maximum
Dissolved oxygen	2.0 mg/l minimum
Dissolved sulfide	0.1 mg/l maximum

pH	6.0 minimum
	9.0 maximum

2. The discharger shall discontinue spray disposal of wastewater during any period in which there is reason to believe the limits specified in D.1 are not being met.

E. Marina Water Quality Limitations

1. The application of copper or other conservative toxicants into state waters to control the growth of algae or aquatic plants is prohibited.
2. Adequate circulation and mixing, or other methods of water quality management, shall be provided so as to maintain the following levels of water quality at all points within the marina:
 - a. Dissolved Oxygen 5.0 mg/l minimum
Annual median = 80% saturation
 - b. pH Variation from ambient pH within the adjacent waters of the Petaluma river by no more than 0.5 pH units.
 - c. Chlorophyll "a" 50 ug/l maximum
When the concentration of chlorophyll "a" in the adjacent Petaluma River exceed 50 ug/l, the concentrations within the marina shall not be more than 20% above the river concentration.
 - d. No visible, floating, suspended or deposited oil or other product of petroleum origin is allowed.

F. Provisions

1. The discharger shall comply with all sections of this Order immediately upon adoption.
2. Board Order No. 84-52 is hereby rescinded.
3. The discharger shall comply with a Self-Monitoring Program as ordered by the Executive Officer.
4. The Board will review this Order periodically and may review the requirements as necessary.
5. The discharger shall review and submit to the Executive Officer an update of their contingency plan for the continuous operation of facilities for the collection, treatment, and disposal of waste pursuant to the Regional Board's Resolution No. 74-10 by October 1 of each year.

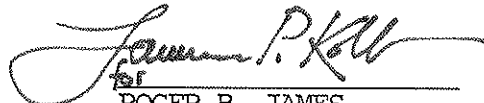
6. The discharger shall submit, no later than September 14, 1987, a contingency plan identifying measures to be taken to assure waste treatment and disposal in accordance with the limitations specified in this Order in the event that flows rise to a level higher than specified in Sewage Disposal Specification B.6.
7. The discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Program as directed by the Executive Officer.
8. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Division 7 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a Regional Water Quality Control Board and which is in full compliance therewith.
9. The discharger shall permit the Regional Board:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept,
 - b. Access to copy any records required to be kept under terms and conditions of this Order,
 - c. Inspection of monitoring equipment or records, and
 - d. Sampling of any discharge.
10. In the event that the discharger is unable to comply with any of the conditions of this Order due to:
 - a. Breakdown of waste treatment equipment,
 - b. Accidents caused by human error or negligence, or
 - c. Other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall:

- a. Include pertinent information explaining reasons for the noncompliance,
- b. Indicate what steps were taken to correct the problem and the dates thereof, and
- c. Indicate what steps are being taken to prevent the problem from recurring.

11. In the event of any change in control of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by a letter, a copy of which shall be forwarded to this Board.
12. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

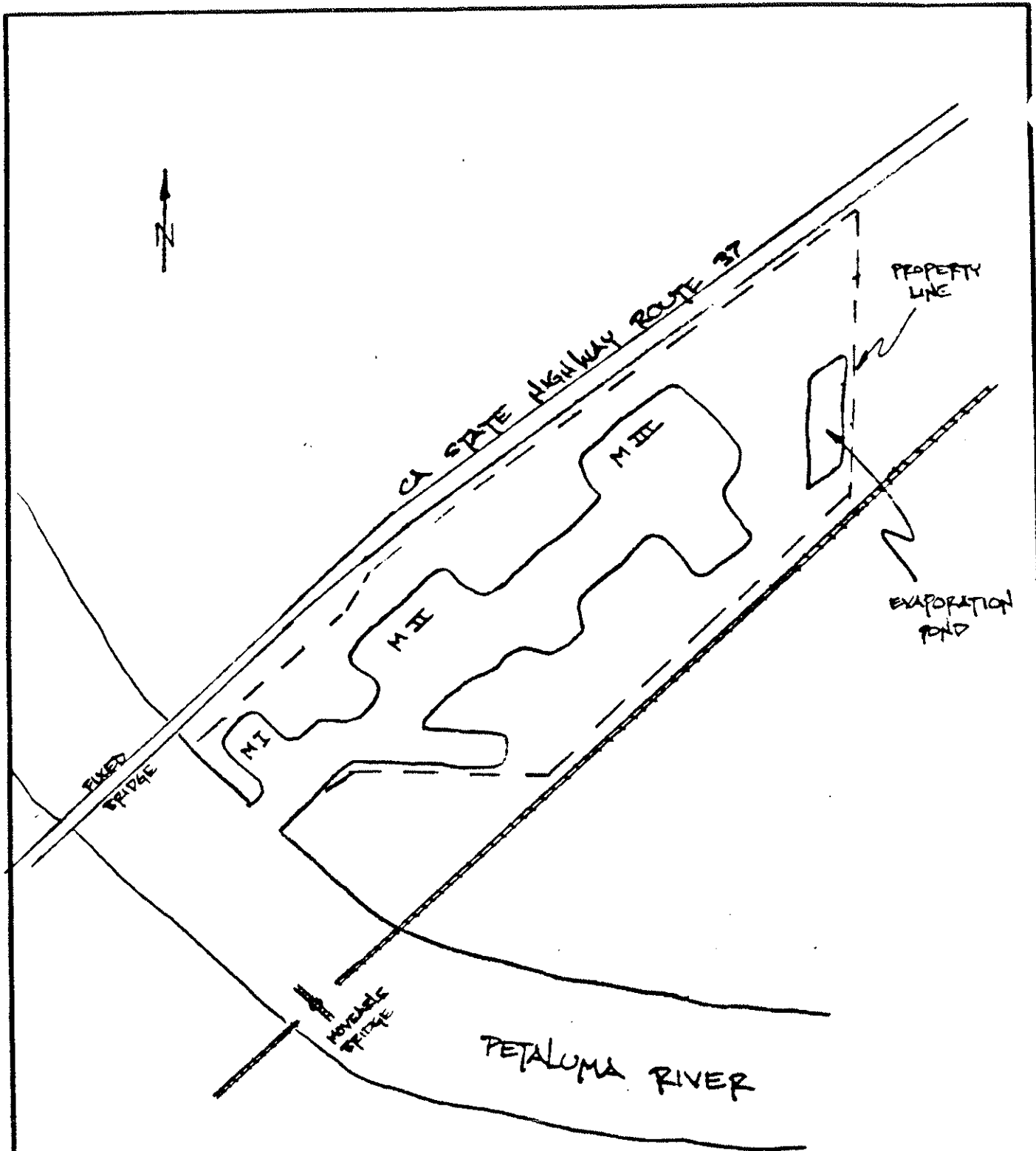
I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 15, 1987.



ROGER B. JAMES
Executive Officer

Attachments:

Site Map
Project Map
Self-Monitoring Program

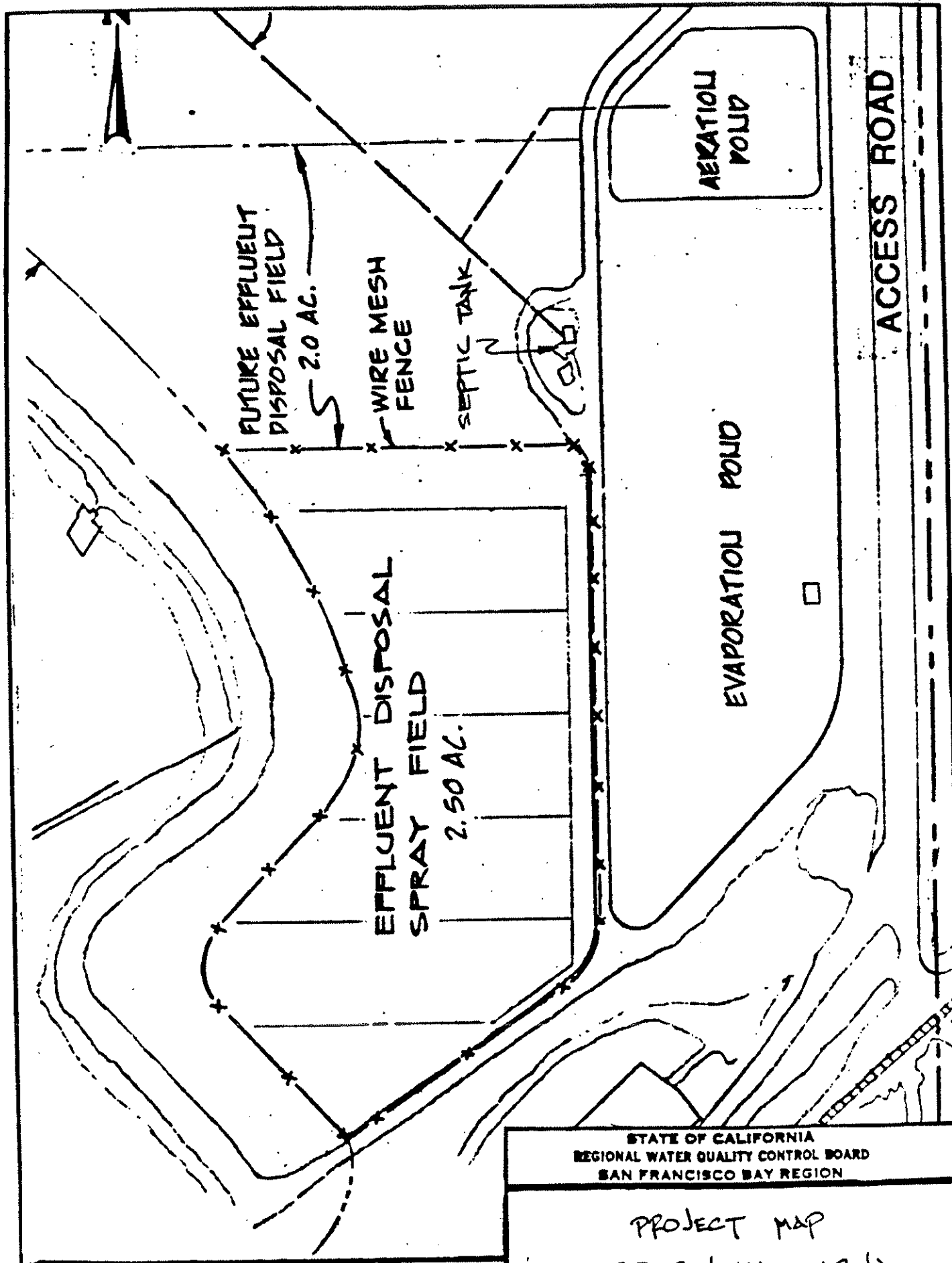


NOT TO SCALE

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SITE MAP
PORT SONOMA MARINA

DRAWN BY: PDS DATE: 1/21/87 DRWG NO.



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

PROJECT MAP
PORT SONOMA MARINA

DRAWN BY: RJD DATE: 1/21/87 DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

FINAL
SELF-MONITORING PROGRAM
FOR

PORT SONOMA MARINA
PETALUMA, SONOMA COUNTY

ORDER NO. 87-031

CONSISTS OF

PART A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

PART A

1. GENERAL

Reporting responsibilities of waste dischargers are specified in this Regional Board's Resolution No. 73-16 and in Sections 13225(a), 13268, 13383, and 13387(b) of the California Water Code.

The principal purposes of a monitoring program by a waste discharger, also referred as a self-monitoring program, are:

- a. To document compliance with waste discharge requirements and prohibitions established by the Regional Board.
- b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

2. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of

"Standard Methods for the Examination of Water and Wastewater"

prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation; or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The Director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

3. DEFINITION OF TERMS

1. A grab sample is defined as an individual sample collected in less than 15 minutes.

2. Standard Observations

a. Evaporation Ponds

This applies both to liquid and solid wastes confined or unconfined.

- (1) Determine height of the freeboard at the lowest point of dikes confining liquid wastes.
- (2) Evidence of leaching liquid from area of confinement and estimated size of affected area (Show affected area on a sketch).
- (3) Odor: presence or absence, characterization, source, and distance of travel.
- (4) Estimated number of waterfowl and other water-associated birds in the reservoir area and vicinity.

b. Spray Disposal Field

- (1) Evidence of leaching liquid from area of confinement and estimated size of affected area (Show affected area on a sketch).
- (2) Odor: presence or absence, characterization, source, and distance of travel.
- (3) Evidence of effluent runoff from the spray disposal area (Show affected area on a sketch).

4. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

1. Description of Sampling Stations

a. Marina Monitoring and Reference Station

Station	Description
M-1 thru M-5	At points in the Port Sonoma Marina located at the far inland extremity, opposite Marina III, one-half way between Marina III and Marina II, opposite Marina II, and opposite Marina I. Include a map indicating locations of sampling stations.
R-1	At a point in the Petaluma River approximately 200 feet upstream from the confluence of the Petaluma River and Port Sonoma Marina.

b. Pond System Monitoring

Station	Description
I-1	At the inlet to the treatment ponds where wastes leave the collection system.
A-1	At any point on the surface of the aeration pond, representative of the wastewater.
E-1	At any point on the surface of the evaporation pond, representative of the wastewater.
O-1	At any point in the outfall from the treatment ponds to the spray areas between the point of discharge and the point at which all waste tributary to that outfall is present.

c. Land Observations

Station	Description
P-1 thru P-'n'	Located at points spaced equidistantly along the perimeter levees of the evaporation ponds.
S-1 thru S-'n'	Located at points spaced equidistantly along the perimeter of the spray disposal field.

Points shall be separated by not more than 1000 feet. A sketch showing the stations shall be submitted with the first monitoring report and subsequent self-monitoring report when station location is changed or a violation is noted.

2. The discharger is required to perform observations, sampling and analysis according to the schedule given in Table I.

5. REPORTS TO BE FILED WITH THE BOARD

1. Violation of Requirements

In the event the discharger is unable to comply with the conditions of the requirements and prohibitions this Order due to:

- (a) maintenance work, power failure, or breakdown of waste treatment equipment, or
- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,

the discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problems from recurring.

2. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month by the fifteenth day of the following month. The reports will be comprised of the following:

(a) Letter of Transmittal

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- i. A discussion of requirement violations found during the past month.
- ii. Actions taken or planned for correcting the violations such as operation modifications, and/or facilities expansion.
- iii. If the discharger has previously submitted a time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.
- iv. A statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

(b) Data Results

All results observed or analyzed including dates and times of sampling and/or observations.


(c) Map

A map shall accompany the report showing sampling and observation locations.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with the Water Reclamation Requirements established in Regional Board Order No. 87-031.

2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the Producers or Users, and revisions will be ordered by the Executive Officer.



ROGER B. JAMES
Executive Officer

Effective Date: 4/21/87

Attachments:
a. Table I

ATTACHMENT A

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

SAMPLING SATATIONS	All M and R-1	A-1 and E-1	I-1* and O-1**	P-1 thru P-'n'	S-1 thru S-'n'
Type of Samples	G	G	G	O	O
Flow Rate (MGD)			D		
pH (unit)	M	M	M		
Dissolved Oxygen (mg/l)	M	M	M		
Sulfides, Total & Dissolved (mg/l) ***	M	M	M		
Coliform Organisms (MPN/100ml)	M				
Chlorophyll "a" (ug/l)	M				
Settleable matter (mg/l-hr)	M		M		
All Applicable Standard Observations				W	W**

LEGEND FOR TABLE

G = Grab Sample
O = Observation

D = Daily
W = Weekly
M = Monthly

Notes:

- * Sample daily flow only
- ** Samples and observations to be taken only when spray discharging
- *** Analyze for this item only when Dissolved Oxygen is below 2.0 mg/l.